



Presentation Overview

- Introduce the Study Team
- Describe Reconnaissance Study Scope
- Overview of Study Area
- Plan for the Public Workshops


The Project Team

- Moffatt & Nichol
 - Project Lead / Engineering
- Kinnetics Laboratories, Inc.
 - Marine Biology
 - Water Quality
- Dr. Phil King
 - Economist
- Clark Stevens
 - Public Outreach

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Reconnaissance Phase Study Objectives

- Determine if water resources problems warrant Federal participation in Feasibility Studies
- Determine the Federal interest
- Complete a *905b Analysis*
- Prepare *Project Management Plan*
- Assess level of interest and support from non-Federal entities
- Negotiate and execute FCSA

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What is Federal "Interest?"

- Commercial Navigation
- Flood Control
- Storm Damage Reduction
- Ecosystem Restoration

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Expedited Reconnaissance Study

From the public and City Council debate on this issue, the primary Army Corps mission that this Reconnaissance Study will address is Ecosystem Restoration through improved water quality, while continuing to protect navigation and coastal areas from storms. Increased recreational and tourism benefits, although outside the Army Corps' core mission, are also important to Long Beach.

City of Long Beach RFP

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COE Policy for Ecosystem Restoration

- Restore to Less-Degraded, More Natural Conditions
- Full Integration with Social and Economic Goals
- Consider from Watershed Perspective
- Analyze both Monetary and Non-Monetary Benefits
- Coordination with Missions of Other Agencies

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Potential Ecosystem Restoration Opportunities

- Restoration of nearshore to open coast habitat
- Improved transport of river sediments and contaminants away from the beach and nearshore habitat
- Improved benthic habitat
- Increasing rocky shallow water habitat
- Reduction of bacterial water quality exceedences on the beach

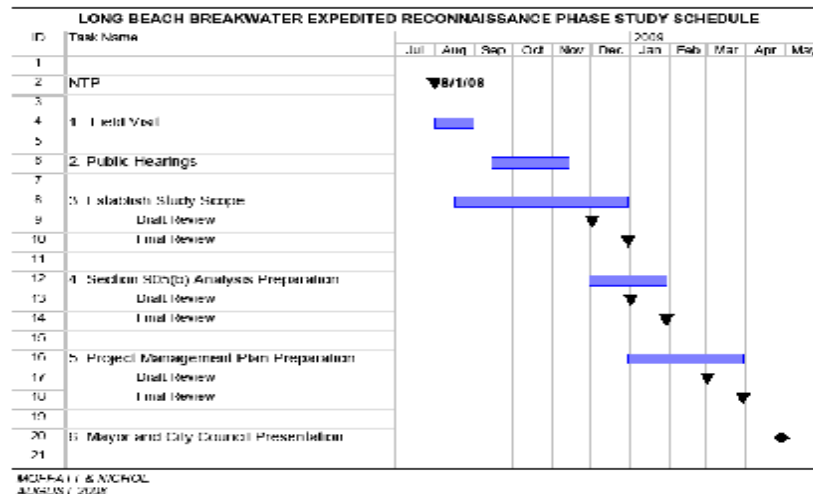
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Hey, What About LOCAL Interest?

- Fed is driving the bus since their breakwater
- City (and others) also have mission and goals (related to Breakwater study)
 - Improve water quality
 - Improved water-related recreation
 - Improve tourism
- City and other local sponsor(s) will be major cost sharing partner(s)

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Study Schedule



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Aerial View of Long Beach Shoreline Area



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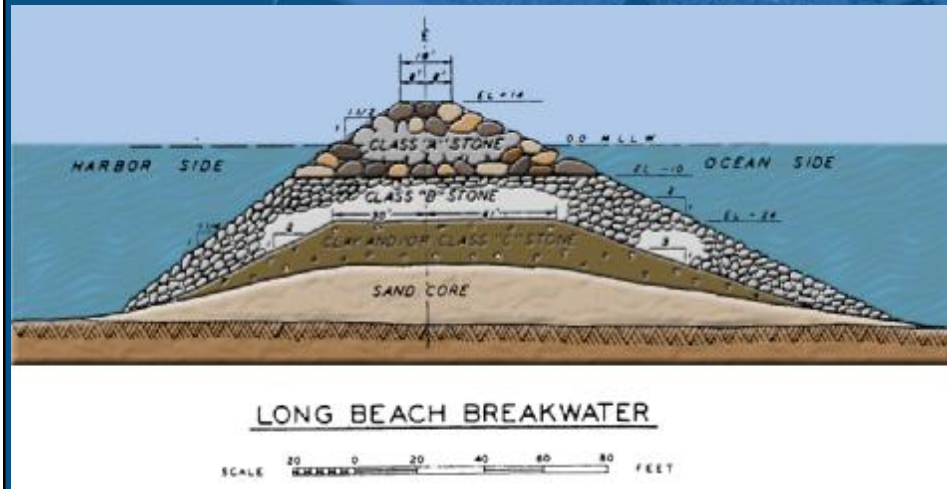
Long Beach Breakwater Construction



SP-583. Roosevelt Base, Tarabul Island, California. 20 Sept. 1941; 2:45 p.m. View +0.2 ft. Contract HJy-4379. Item 18. Floating derricks No. E-500 (right) and No. 4 (left) placing Silveride "A" rock on outer breakwater.

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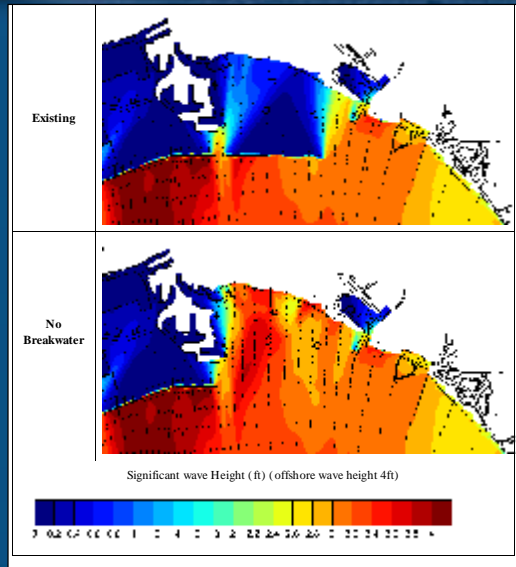
Long Beach Breakwater Cross Section

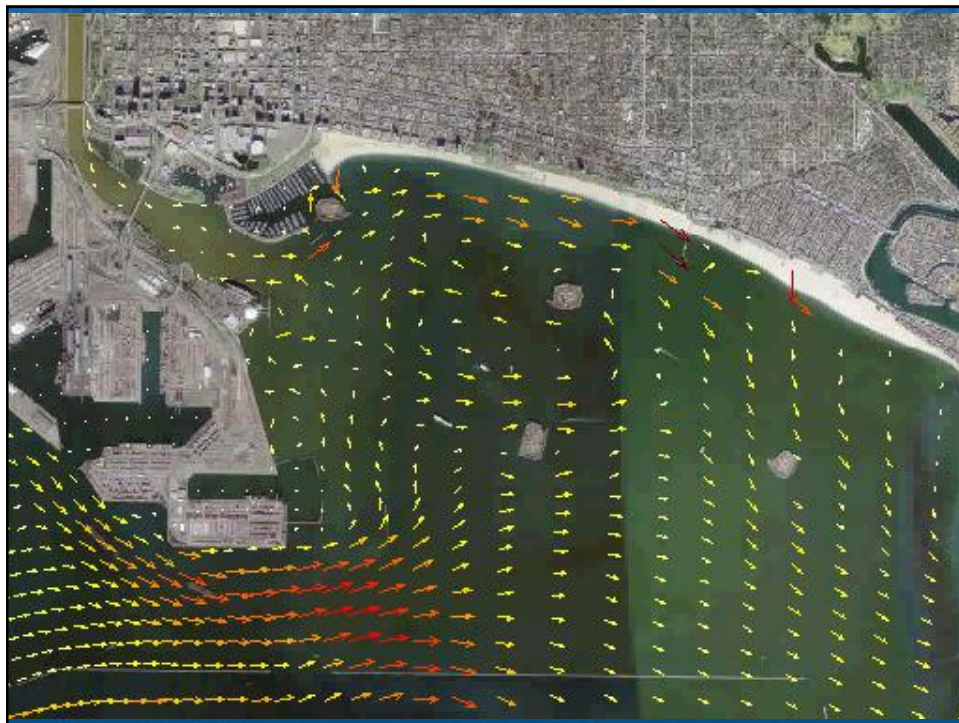
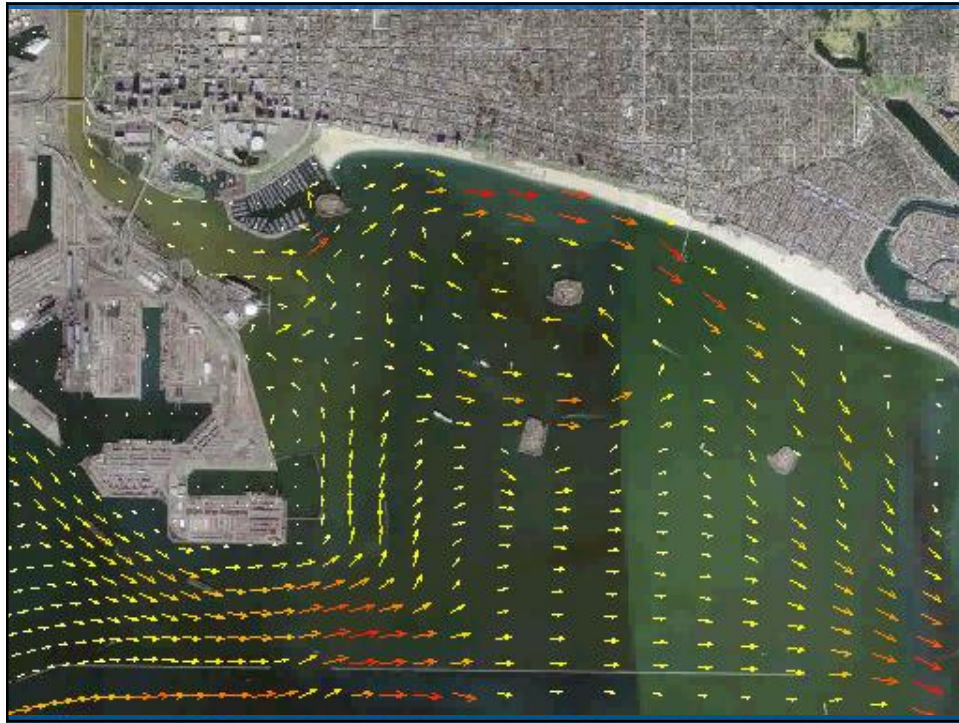


Computer Model – Big Tool in the Toolbox




Wave Propagation Modeling






Upcoming Public Workshops

- Workshop Schedule / Purpose / End Products
- Three-Part Workshop Format
- Plan for Breakout Sessions
 - Opportunities and Constraints Matrix
 - Design Workshop for Breakwater Reconfiguration

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Thanks for Coming...

See you at the workshop(s)!

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